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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/561,781                       | 12/19/2005  | Toshiaki Oka         | 96790P516           | 5872             |
| 8791                             | 7590        | 02/12/2008           |                     |                  |
| BLAKELY SOKOLOFF TAYLOR & ZAFMAN |             |                      | EXAMINER            |                  |
| 1279 OAKMEAD PARKWAY             |             |                      | TAYLOR, VICTOR J    |                  |
| SUNNYVALE, CA 94085-4040         |             |                      | ART UNIT            | PAPER NUMBER     |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |
|------------------------------|--------------------------------------|-----------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/561,781 | <b>Applicant(s)</b><br>OKA ET AL. |
|                              | <b>Examiner</b><br>VICTOR J. TAYLOR  | <b>Art Unit</b><br>2863           |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 19 December 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 December 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date: _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-166/08)<br>Paper No(s)/Mail Date <u>12/19/2005</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claims***

1. Claims 1-21 are pending in the instant application. Therefore, claims 1-21 are presented for examination.

### ***Drawings***

2. The drawings were received on 12/19/2005. These drawings are approved.

### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) was submitted on 12/19/2005. This submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### ***Specification***

4. The abstract of the disclosure is objected to because of the numbers listed on the page margins. The abstract is required to be in a single paragraph on a single page. Correction is required. The numbers in the margins (5) and (10) are required to be deleted. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities:

The examiner objects to the claims and to the use of the terms of "unascertained water occurrence", combined with the terms for the "estimating means" as found representative claim 1, and used in the claims language.

Wherein the claimed steps for "outputting an unascertained water occurrence" is interpreted to mean an "undetermined rainfall water occurrence" and "estimate" that is not clear. It is also not clear, just how the step for outputting the "undetermined rainfall fall water occurrence distribution for each district" is accomplished.

6. The disclosure is further objected to because of the following informalities:

The specification is not presented in the correct required format and the section title arrangement for providing standard section titles as required per 37 CFR 1.77 (b) is missing. The specification appears to be a translation of the Japanese specification.

The applicant is requested to follow the guidelines.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

***Arrangement of the Specification***

7. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:
- (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
  - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
  - (f) BACKGROUND OF THE INVENTION.
    - (1) Field of the Invention.
    - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
  - (g) BRIEF SUMMARY OF THE INVENTION.
  - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
  - (i) DETAILED DESCRIPTION OF THE INVENTION.
  - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
  - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
  - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825.
    - A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
- Appropriate correction to the specification is required.

**Prior Art**

8. The prior art made of record and not relied upon is considered pertinent to applicant.

I. Art A of Gomes De Oliveira, US 7,297,258 B2 in class 210/221.2 is cited for the apparatus for the coupling of a sewer treatment station to a treatment plant for the flocculation and flotation of water streams and the insertion of treatment plant for the treatment of water streams into a sewage treatment plant (WTS) in figure 1 with the water stream (1) included into the tertiary treatment lines 30-55 of column 6.

II. Art B of Smith et al., US 5,620,594 A in class 210/167 is cited for the water management system using a distribution system for undetermined rainwater and sewer fluids with rainwater diversion (16) in figure 2. He further teaches water management system in line 29 of column 2 in combination with the complete patent.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. The claims are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

11. Regarding claim 1, for representative example, wherein the limitations in claim 1 for the "unascertained water occurrence distribution estimating "means" to output an "unascertained water occurrence distribution" is not clear from the translation. The term for "unascertained" is interpretive to mean an "undetermined rainfall of water flow" into the sewer system fluid. The term for outputting the "unascertained water occurrence" is not clear. It is not clear in the claim structure, as to just how this "rainfall water occurrence is estimated" and/or just how this "rainfall occurrence is outputted and distributed" in each distribution.

12. Regarding claim 1, and the word "means" is preceded by the words "estimating and processing" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function step is specified

by the words preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

13. As to claims 2-7, which stand rejected as rejected on a rejected base claim 1. Wherein, claims 2-7 further recite a "device" system that is dependent on a "means", by using steps to further limit the computer computations "method" for "pattern matching analysis" with the system and the said "device", and is not clear and appears to be hybrid claim structure.

Corrections are required.

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kodate in US Patent 4,987,913 A.

With regard to claim 1, wherein the cited limitations as interpreted in the broadest meaning with interpretations to include the estimating device for the "undetermined rainfall estimating device", and wherein the "processing device" is to include the "pattern analysis", and wherein the terms for the "unascertained water occurrence" is interpretive to mean the "undetermined rainfall" as applied to the claim limitations in the instant application.

And, Wherein the limitations define apparatus for the unascertained water occurrence distribution estimating device wherein the undetermined rainfall is interpreter as the "unascertained water occurrence distribution estimating means for outputting an unascertained water occurrence distribution in each district, in which an occurrence distribution of unascertained water flowing into a sewer is to be estimated, on the basis of a comparison result between unascertained water occurrence function information in

said district and unascertained water amount function information at a base point located downstream of said each said district", is disclosed in the rain fall (3) using all elements of figure 3 in the storm pump operation apparatus disclosed in lines 15-65 of column 2.

And wherein the undetermined rainfall estimating device is disclosed in the "said unascertained water occurrence distribution estimating means including; "first processing means for performing a pattern matching analysis between unascertained water occurrence function information in each said district, which is generated from unascertained water occurrence factor information in a district of interest which includes an amount of rainfall in the district of interest, and the unascertained water amount function information including an amount of unascertained water at the base point" as disclosed in the computer processing unit (2) which provides the computational means in figure 1 as taught in the first and second processes in lines 20-55 of column 4.

and further discloses the "second processing means for outputting a pattern matching degree for said-each said district which is obtained by the pattern matching analysis as an unascertained water occurrence distribution in each said district" as the analyzing processing unit (10) and the computer processes unit (9) in figure 1 and processing rain fall data in lines 25-50 of column 6.

As to claim 2-7 which stands rejected on the rejected base, and the arguments applied above (supra) are applied to claims 2-7 for their common features, and wherein

For claim 2 discloses the rain fall data (D2) in figure 2A.

For claim 3 discloses the pattern matching in the 2D data point by point matching (E2) in figure 2A.

For claim 4 discloses the calculation function (E8) in figure 2B.

For claim 5 discloses the calculation in the runoff analysis (E6) in figure 2B.

For claim 6 discloses the time series rainfall calculation in rainfall calculation curve processes (E5) in figure 2A.

For claim 7 discloses the pattern matching in the forecast (E4) processes to compute the data in figure 2A and teaches the rain fall matching in figure 9 in combination with lines 50-67 of column 4 in combination with the complete document.

With regard to claim 8, wherein the cited limitations as interpreted in the broadest meaning with interpretations to include the estimating device for the "undetermined rainfall estimating device", and wherein the "processing device" is to include the pattern analysis, and wherein the terms for the "unascertained water occurrence" is interpretive to mean the "undetermined rainfall" as applied to the claim limitations in the instant application.

And, Wherein the limitations define apparatus for the unascertained water occurrence distribution estimating device wherein the undetermined rainfall is interpreter as the "unascertained water occurrence distribution estimating means for outputting an unascertained water occurrence distribution a plurality of district, in which an occurrence distribution of unascertained water flowing into a sewer is to be estimated, on the basis of a comparison result between unascertained water occurrence function information in said district and unascertained water amount function information at a base point located downstream of said each said district", is disclosed in the rain fall (3) using all elements of figure 3 in the storm pump operation apparatus disclosed in lines 15-65 of column 2.

And wherein the undetermined rainfall estimating device is disclosed in the "said unascertained water occurrence distribution estimating means including; "first processing means for performing a pattern matching analysis between unascertained water occurrence function information in each said district, which is generated from unascertained water occurrence factor information in a district of interest which includes an amount of rainfall in the district of interest, and the unascertained water amount function information including an amount of unascertained water at the base point" as disclosed in the computer processing unit (2) which provides the computational means in figure 1 as taught in the first and second processes in lines 20-55 of column 4.

As to claim 9-14, which stands rejected on the rejected base, and the arguments applied above (supra) are applied to claims 7-14 for their common features.

With regard to claim 15, wherein the cited limitations as interpreted in the broadest meaning with interpretations to include the estimating device for the "undetermined rainfall estimating device", and wherein the "processing device" is to

include the pattern analysis, and wherein the terms for the "unascertained water occurrence" is interpretive to mean the "undetermined rainfall" as applied to the claim limitations in the instant application.

Wherein a "recording medium recording having a program recorded thereto, for causing a computer for an unascertained water occurrence distribution estimating device, which outputs an unascertained water occurrence distribution in each of a N utility in which an occurrence distribution of unascertained water flowing into a sewer is to be estimated, on the basis of a comparison result between unascertained water occurrence function information in said-each said district and unascertained water amount function information at a base point located downstream of said each district (2), to execute is disclosed in figure 1 and teaches all elements in the computation processes all elements of figure 2A in combination with the centroid distribution in figure 4 and lines 1-65 of column 7.

He further discloses "a first step of performing a pattern matching analysis between unascertained water occurrence function information in said-each said district, which is generated from unascertained water occurrence factor information in a district of interest which includes an amount of rainfall in the district of interest, and the unascertained water amount function information including an amount of unascertained water at the base point, and the second step of outputting a pattern matching degree for said-each said district which is obtained by the pattern matching analysis as an unascertained water occurrence distribution in said-each said district" in figure1 combined with all elements as the analyzing processing unit (10) and the computer processes unit (9) in figure 1 and processing rain fall data in lines 25-50 of column 6.

As to claim 16-21, which stands rejected on the rejected base, and the arguments applied above (supra) are applied to claims 16-21 for their common features, and wherein the disclosed preferences information for data storage and retrieval in line 56 of column 9 and in combination with lines 25-65 of column 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR J. TAYLOR whose telephone number is (571)272-2281. The examiner can normally be reached on 8:00 to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2863. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. J. T./  
Examiner, Art Unit 2863.  
Friday, February 01, 2008.

/John E Barlow Jr./  
Supervisory Patent Examiner,  
Art Unit 2863